Figure 1

Headend or Transmission Facility 1

EPG Data Provider

EPG Data Server 6

Home Control Tag Server 7

Distribution Network 2

Customer Premises

STB 3

TV 8

CE Device 4

Home Automation Network 5

Figure 2A: IR Interface

IR Receiver

STB 3

IR Blaster Port

Home Automation Controller

Home Automation Network

IR Blaster (Transmitter)

Consumer Electronic Device

IR Receiver

Figure 2B: RS-232 Serial Interface

STB 3

RS-232 Port

Home Automation Controller

Home Automation Network

Adapter

Consumer Electronic Device

Adapter
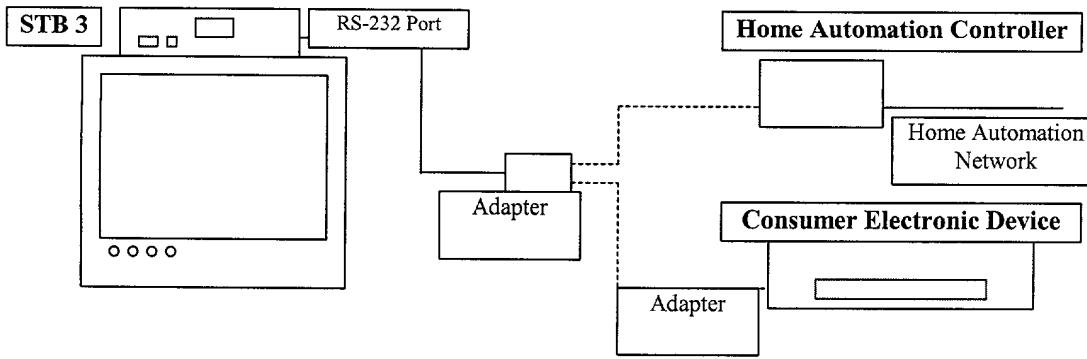
Figure 2C: Expansion Bus Interface

STB 3

Home Automation Controller

Home Automation Network

Consumer Electronic Device

Standard Interface (e.g. Firewire)
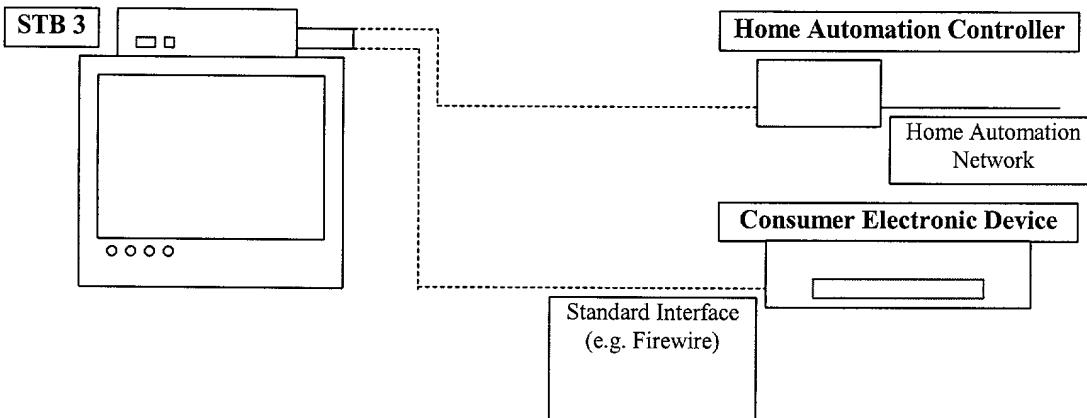
Figure 3

Figure 4A: IR Interface

IR Receiver

STB | IR Blaster Port

PDA

IR Blaster
(Transmitter)

IR Transmitter &
Receiver
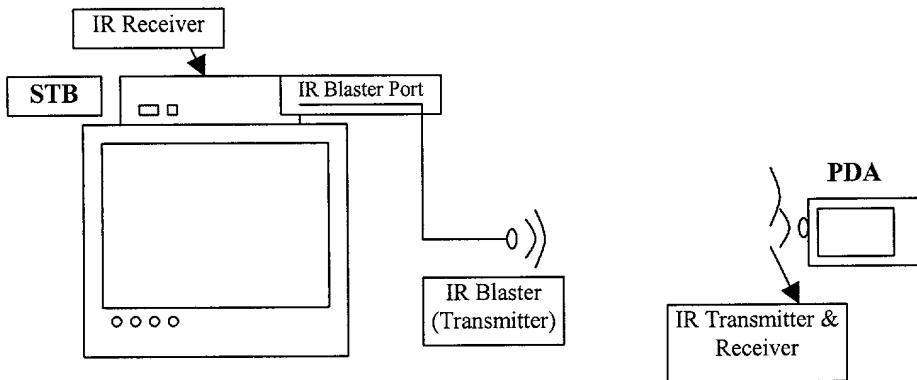
Figure 4B: RS-232 Serial Interface

STB | RS-232 Port

PDA

PDA Data
Interface
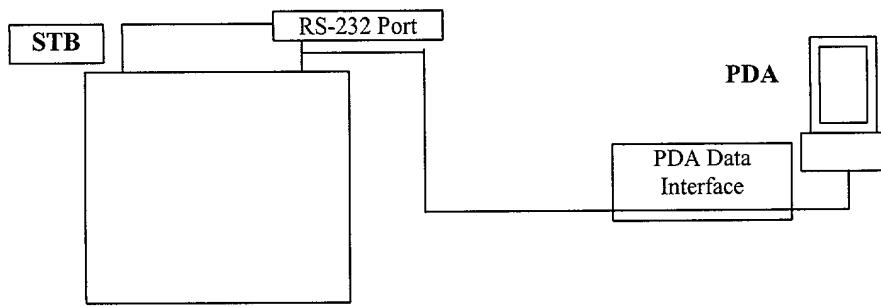
Figure 4C: Expansion Bus Interface

Expansion Bus
Peripheral

PDA

STB

PDA Data
Interface
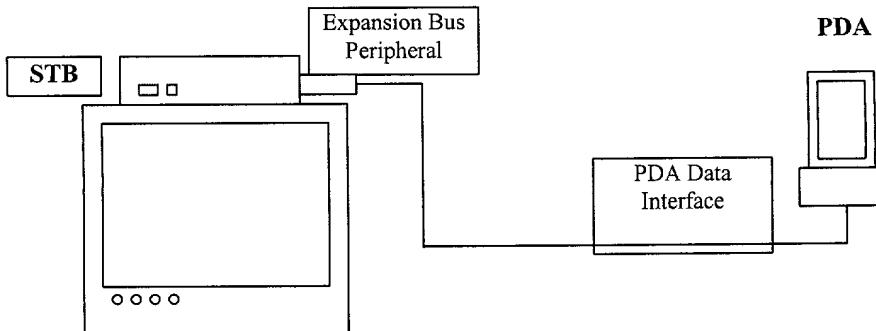
Figure 5: System Overview

Headend or Transmission Facility 1

Customer Premises

EPG Data Provider

EPG Data Server 6

Internet Tag Server 7

Distribution Network 2

Internet

STB 3

TV

VCR

DVD Player

Home Automated Network 5

...

Internet

PC 4

Other Consumer Electronics Devices
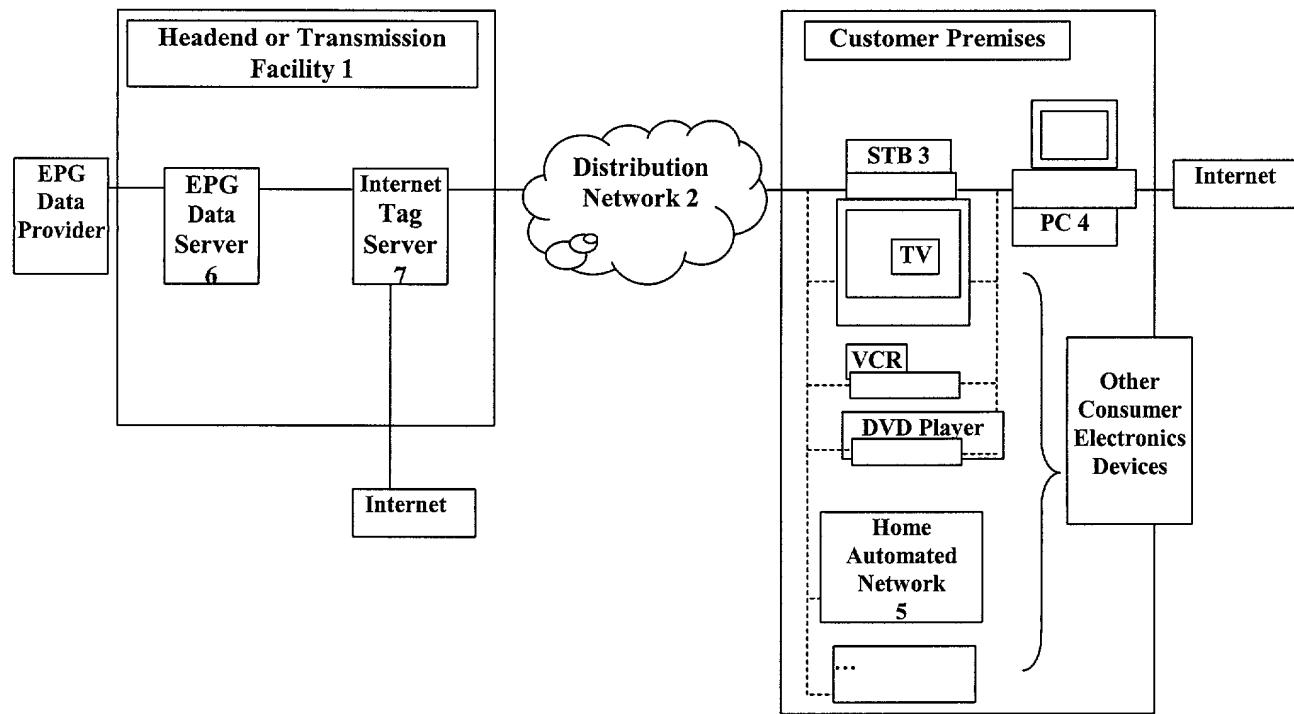
Figure 6A: IR Blaster to IR Receiver Interface

STB

IR Blaster Port

PC

Standard PC Port*

IR Blaster (Transmitter)

IR Receiver

Internet Connection
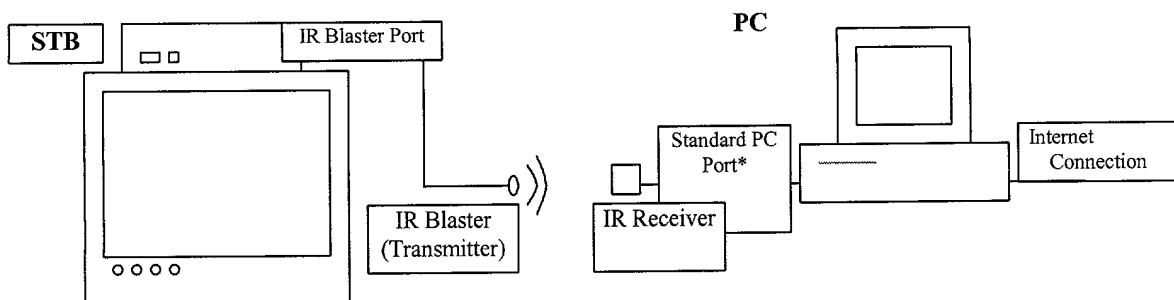
Figure 6B: Blaster Port Translator Interface

IR Blaster Port

PC

Standard PC Port*

IR Signal Translator

Internet Connection
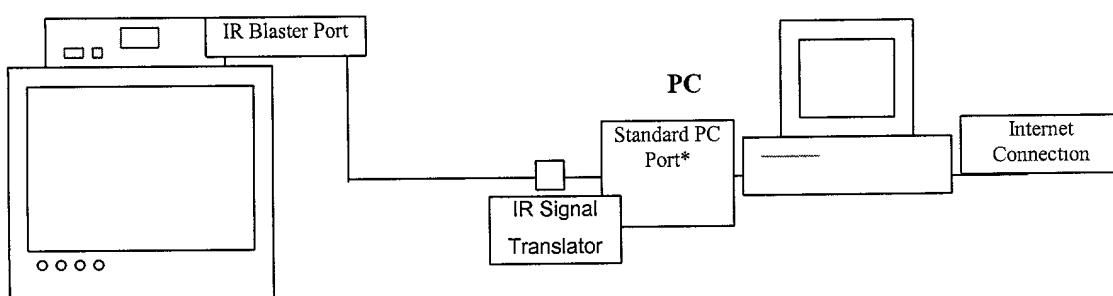
Figure 6C: RS-232 Serial Interface

RS-232 Port

PC

RS-232 Port

Internet Connection
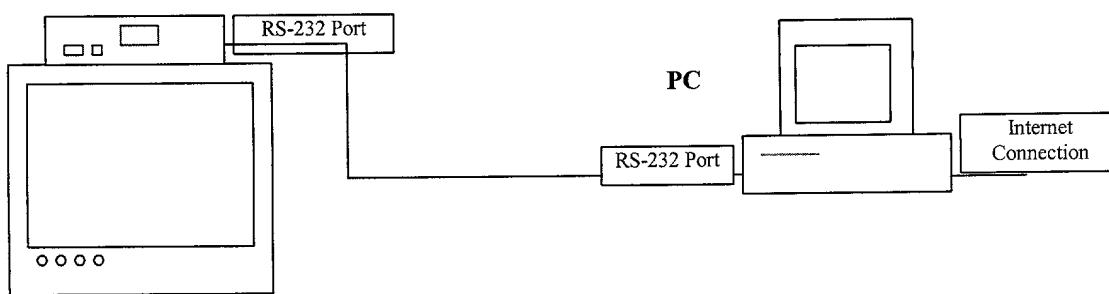
Figure 6D: Expansion Bus Interface

Expansion Bus Peripheral

PC

Standard PC Port*

Internet Connection
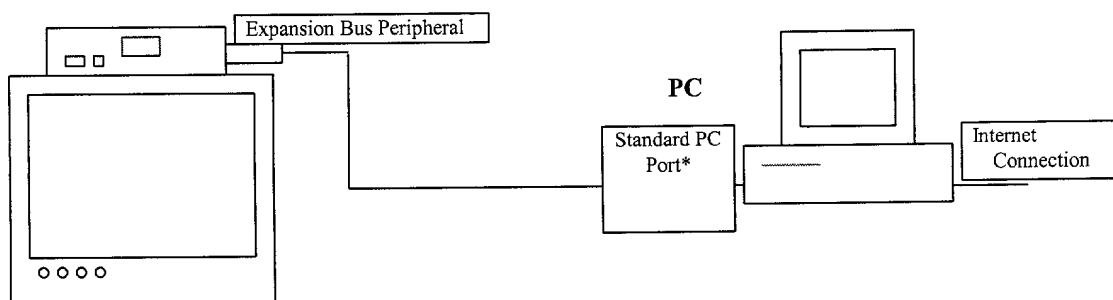
Figure 6E: Modem Interface
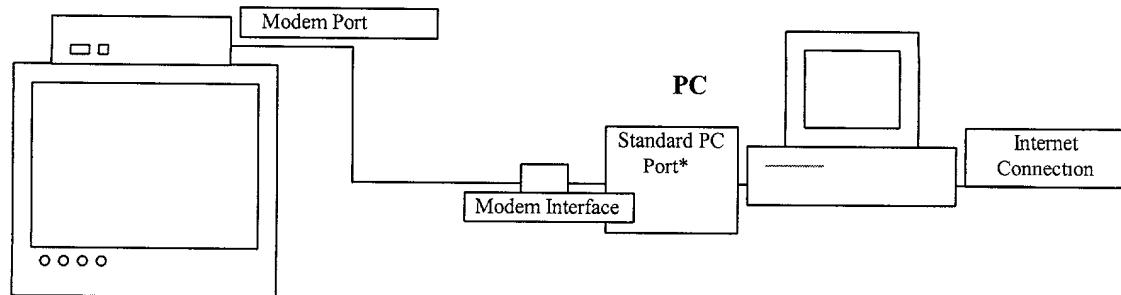
*Examples of a standard PC port include RS-232, USB, Centronics, SCSI, Firewire or Ethernet.